1: Titiev E-5 (1948) 1951 SG4 Araucanians SG4
Mapuche-Huilliche

Within the traditional homes the central fireplace provides the only artificial light and heat that the occupants enjoy, although candles and kerosene lamps are gradually being adopted by those who can afford them. Cooking is done at the open fire, often in pots that are suspended by chains. Pottery vessels were formerly the rule, but commercially made iron utensils are now common. Wood is the chief fuel, but straw may be used to build up a refractory fire. Unlike farmers in the United States, who take pride in having neat and ample piles of seasoned wood, the Araucanians have the custom of dragging several large pieces of timber into their yards. Here the wood lies exposed to the weather and, whenever necessary, someone hurries outdoors and chops off a few sticks. Even in the rainy season no attempt is made to store up a large quantity of dry wood. At night, fires are neither extinguished nor kept going. They are generally covered and left smouldering so that they may readily be blown up the next day.

SETTLEMENT PATTERN

One of the most striking aspects of a contemporary Araucanian reservation is the absence of any formal distribution of houses: "There are no streets, no central plaza, no stores or public buildings, in short, nothing that suggests the spatial arrangement of a village or town."[11] Not infrequently, houses are built in small clusters of three or four, known as *lofche*, but single dwellings that stand apart are common. As a general rule, each home is within view of several others, but rarely do footpaths connect the structures. This separation has been noted by a number of writers, but it has never been completely explained.

Very likely, the antipathy of the Mapuche for spatial cohesion may originally have been a reflection of their loosely knit social organization, and it may also have been an expression of their deep desire for independence. Then again, during the era of steady fighting such a settlement pattern may doubtless have had strategic significance, for no enemy commander was likely

[11] Titiev, 1949, p. 3.

1: Titiev E-5 (1948) 1951 SG4 Araucanians SG4
Mapuche-Huilliche

Yerba maté may also be taken by groups of men as a sort of afternoon tea on festive occasions. A host's womenfolk prepare and hand to him a cup nearly filled with dry leaves, and a small tea kettle of boiling water. The host fills the cup with hot water and offers it to a guest who sips the free liquid through a narrow hollow tube (bombilla), commonly fashioned from brass. Then the cup is refilled with hot water and goes the rounds until everyone has had enough. Because the tea leaves absorb most of the fluid, a man can drink six or eight cups without getting a great deal of liquid.

In the region under discussion fish is unavailable, and meat is seldom eaten, except during fiestas. The roasted flesh of sheep, cows, pigs, chickens, and other poultry is much enjoyed, but the favorite meat is that of a young mare. When meat is included in the daily diet, it is most often made part of the mid-day meal.

Several traditional beverages continue to be consumed in large amounts. Fruit, cereal, and vegetable extracts, mixed with water and usually fermented, are old-time favorites. Most popular of all are: *chicha*, a cider made from the juice of mashed apples;[28] *mote*, made of decorticated wheat or corn boiled in water;[29] *mudai*, prepared from wheat with the skin on;[30] and *muska* or *chicha de maiz*, a fermented beverage prepared with premasticated corn.[31] All of these drinks are commonly allowed to develop an alcoholic content, and early chroniclers are agreed that the Araucanians have long been addicted to intoxicants, particularly at fiestas.[32] Some nineteenth-century observers have pointed out that the incidence of drunkenness increased rapidly in the reservation period, for every Chilean town in the

[28] Latcham (1909, p. 343) reported that apple *chicha* is made by men. Other fruits are sometimes substituted for apples. The presence of pipe in a drink used to be considered an omen of fertility.

[29] Skin was removed with a strong solution of ashes. Cf. Joseph, 1931a, p. 92.

[30] Good accounts of *mudai* manufacture may be found in Moesbach, 1930, pp. 145–46, and in Housse, 1939, pp. 172–75.

[31] Augusta, 1934, p. 13. A vivid reaction to the premastication process occurs in Smith, 1885, pp. 300–4.

[32] Cooper, 1946, p. 741.

1: Titiev E-5 (1948) 1951 SG4 Araucanians SG4
Mapuche-Huilliche

Frontera became a center for the sale of cheap but powerful liquor.[27] Unscrupulous tradesmen, as has already been mentioned, regularly encourage the Indians to drink when a transaction is being made, and alcoholism is currently a major problem.[28]

At meals women used to serve adult men first and children after their elders, but it has become the practice for family groups to eat together. Home made wooden bowls, platters, ladles, and spoons were formerly widely employed,[29] but store-bought enamel cups, metal pots and tea kettles, inexpensive "china," and tin spoons are now coming into use.

The only universal food tabus apply to snakes and frogs. In addition, young people are forbidden to eat sheep testicles, lest girls develop pains in the breasts and boys suffer from aching testes. Growing children are not allowed to eat bone marrow, because it is regarded as a "watery" substance that will retard their development. Furthermore, to ensure that they will not engage in premature sexual activity, adolescent girls may not eat unripe fruit, and grown women must abstain from fish lest, like them, they refuse to settle into permanent homes.[30]

Tobacco smoking, particularly in pipes, is reported to have been widespread among elderly people, especially men.[31] The absence of native tobacco, and the expense of standard brands have combined to eliminate this custom on most reservations. Such smoking as I personally observed was done by young men who occasionally accepted the offer of a cigarette.

[27] Natives most often drink a cheap wine nowadays, fortified by the addition of strong roots, herbs, or nut shells. One big drink often intoxicates them, sometimes to the point of stupefaction. Some manage to ride home, but others fall by the roadside to sleep off the effects.

[28] Latcham (1909, p. 335) expressed himself strongly on this point.

[29] For the manufacture of a wide variety of wooden utensils, see Joseph, 1931a, pp. 53–85.

[30] The details of food tabus were obtained only from a single informant, J. M. Collío. These data need to be checked before they can be regarded as widespread Araucanian beliefs. Some comparative material is given in Guevara, 1929, II: 163–66.

[31] Guevara, 1911, pp. 253–82. Stone pipes occur abundantly in archaeological deposits.

4:Latcham F-5 (1888-1893) 1909 SG4 Araucanians SG4

342 622 The huts of the chiefs and principal men are divided by bamboo screens, each wife having her separate sleeping and cooking place; but among the unmarried the same confusion prevails.

621 The Indian villages are never large, seldom containing more than a dozen huts, generally fewer. This dislike to congregating in numbers is probably a relic of their old hunting instinct, and dates from the time when their mode of life necessitated an extensive tract of country for the requirements of each family or clan.

352 The household effects are of the scantiest and rudest description. They use no tables, and their seats are either rough benches or blocks of wood; although the Indian for the most part squats cross-legged on the ground. They make a rude kind of bedstead of four forked sticks, planted in the ground. Two parallel bars are placed in the forks, and a horse or bullock hide is stretched tightly across them and fastened by strips of hide. Their beds consist of piles of sheep skins with the wool still on, or bundles of rushes covered with coarse native-made blankets. Another bundle of rushes or roll of skins forms a pillow, although this latter is frequently wanting.

[354] The native cradle is rather ingenious. It is a kind of basket hung from the roof by cords, generally over the bed of the mother, who can thus swing it without rising.

485 The cooking utensils consist of coarse earthenware pots of different sizes; and the meals are eaten from roughly hollowed wooden platters with rude spoons of the same material. Their clothes, when not in use, are kept in large hide sacks, suspended from wooden hooks fastened in the uprights of the house. Each wife has her separate fire, cooks the food and attends to the wants of her own progeny.

356 Although the Araucanos are cleanly in their persons they are not so in their households; and, as in most inferior communities, they form a happy family, the pigs, poultry, dogs, cats, etc., all sleeping under the same roof.

284 [229] 283 [239] *Weaving.*—The first material used by the Araucanos in their weaving was the fibre of certain plants and the inner bark of determined trees, especially the epauke (*Bromelia lanuginosa*), which to-day are only utilized for making ropes, baskets, cords, and fishing lines. Now they use the wool obtained from their numerous flocks.

283 To twist the wool they use a very simple spindle, shaped like a shuttle and about 10 inches long. At the lower end is fixed a perforated stone disc. The wool is taken in the left hand and wound around the left arm, the right hand being used to twirl the spindle and draw out the wool. Their looms are also very

286 primitive and easily constructed, and being adjustable can be used for any sized cloth required. The vertical frame is about 5 feet high, with a series of holes ½ inch in diameter and about 6 inches apart, to allow the regulation of the crossbar which indicates the width of the piece to be woven. The cross-beams top and bottom are fixed to the uprights by wooden pegs, and the top one can be

4:Latcham F-5 (1888-1893) 1999 SG4 Araucanians SG4

323 415 The usual forms given to the household ware are those known as pitchers, jars, and pots. Both the pitchers and the pots are made with two ears or handles, and only differ in their relative diameters. Occasionally the jars or pitchers are given the shape of some animal, usually a sheep, dog, or pig, but are very rudely modelled.

Besides the coarse pottery used for domestic purposes, the Araucanos make a finer kind such as is frequently found in their burying places. The shapes most in use for this ware are bowls and small pitchers. It is made from a fine red clay and generally ornamented with designs of other colours, sometimes painted, sometimes formed of clays of other colours let in like mosaic. The principal colours used for these designs are white and black.

323 A glaze is given sometimes by the addition of a little ground quartz or felspar, or more commonly by throwing handfuls of salt into the vessels when they are at a red heat. The ovens are simple holes in the ground kept filled with burning embers and ashes, and the cooling is done gradually.

One particular kind of ware, very highly prized among the tribes, is ornamented in a peculiar manner. The design is traced out while the clay composing the vessel is still plastic. Following this design a clean groove is cut about an eighth of an inch deep. The vessel is then baked. On cooling, a fine white clay mixed with powdered shell is pressed into the grooves, and carefully scraped over afterwards to leave a smooth clean-cut surface. The inside is lined with the same mixture, and again set to bake in a fierce fire, which causes the clay in the design to set. This ware is not glazed but is brought to a bright surface by polishing. The designs [534] most used are chevrons, chequers, triangles, lozenges, herring bones, and a kind of fretwork pattern. All the patterns used are composed of straight and parallel lines.

372 *Fire.*—There seems to be no special rites connected with fire or its maintenance, although formerly there may have been. The Indian now obtains his fire in the orthodox civilized way, by using matches, or with flint and steel. Occasionally I have seen it produced by the friction of two sticks, one hard and pointed, the other rotten and extremely dry. The pointed stick is rolled rapidly between the hands and works as in a socket, considerable downward pressure being used. A remnant of old usages may be noted in the custom among the Indians of covering up the embers at night with ashes so that they are still smouldering in the morning.

262 *Food.*—The food of the Araucano is abundant, nutritious and varied. The country itself produces more than sufficient for his needs; although of late years owing to the settling and colonization of this portion of Chili, the sale of Indian lands, and their confinement to reserved territories have brought about a considerable modification in their mode of living, and they have found it more necessary to resort to agriculture and the rearing of flocks and herds.

[131] First among the natural products are various classes of tubers, especially the wild potato (*patti proveniensal pampi*). Edible roots are extremely abundant, as also several kinds of wild cereals, from the most important of which, millet (*Anagua*) and rye (*Amgo*), they make a coarse unleavened bread.

4:Latcham F-5 (1888-1893) 1909 SG4 Araucanians SG4

The food is served in wooden bowls and platters, the men being served first. They do not use a different bowl or platter for each individual, but the adult males sit round the bowls in groups of three or four, each one helping himself in rotation, beginning with the eldest, or with the guests, if any are present. Should the visitor be a stranger or a person of consideration he is given a platter to himself. They use wooden spoons for their meals, but latterly the tin or pewter article of commerce has been much adopted. After the men have finished, the women and children partake of the leavings in the same manner.

The platters and spoons are not washed till after the meal. To remove grease they use wood ashes.

A few of their principal dishes are as follows: *tiewa corí*, flesh cooked with broken wheat or maize; *puñi corí*, potatoes and maize; beans or peas boiled with grease, and various other stews in which the *motí* or skinned wheat or maize form the principal ingredient. The coast Indians also use two or three edible kinds of algæ.

The favourite meat is horse-flesh, and mutton, half cooked, but they prefer the former, seldom killing their horned cattle, which they keep for commercial and agricultural purposes.

Another common article of fare is the *ulpud*, with which the Indian concludes most of his meals, breaks his fast in the early morning, and which he takes with him on all his journeys. It consists of toasted wheatmeal, and is eaten or drunk with water which any brook or spring supplies.

The Indians take their meals at any hour, but generally at mid-day and sun-down. If they feel hungry at other times, the inevitable *ulpud* is their immediate solace.

They have no special names for their meals.

The use of bread antedates the Spanish conquest, and at present they prepare different kinds from all their cereals.

The latter are ground, not by pounding but by rubbing. A little grain is placed on a flat stone, and rubbed with a smaller one, held in both hands; the operator kneeling beside the larger stone and bringing the weight of the body to bear in the operation. The meal is sometimes sifted in horsehair sieves, but is generally used entire.

No ovens are used, but the bread is baked in the ashes in the form of *tortillas* or flat cakes. A primitive leaven is prepared by the old women or children chewing the grain and then leaving it to ferment in water, or in a hole in the ground.

There is very little difference in the foods of the upper and lower classes among the Araucanos, save perhaps the quantity of flesh consumed; nor do there seem to have been any tabooed foods. Men and women eat from a common supply.

Like most other barbarians, these Indians are greatly addicted to drunkenness, especially since the introduction of distilled spirits. They are accustomed to

5:Cooper E-4 (no date) 1946 SG4 Araucanians SG4

263 Honey, ají, and salt were used as condiments. Salt was obtained
[317] from the sea and from Andean salt deposits. Where salt was lacking, as near the Coast, food was cooked in salt water, or plant ashes were substituted. The oil made from madi seeds was much used in cooking. Wild thyme and wild mint were also used as seasoning (Latcham, 1909, p. 341).

252 A great number of different dishes were made. Stews or broths were the more common; e.g., meat and maize, maize and potatoes, beans and grease, etc. A favorite dish was made of potatoes allowed to rot a couple of months in stagnant water. Another favorite was apoll, parboiled lungs of an animal so slaughtered that they filled with blood. Raw blood of cattle was drunk or eaten coagulated.

264 **Eating.**—Fast was broken in the morning with the maize (or wheat) flour drink mentioned above. In early times, two meals a day were customary, the first just before noon, the second at dusk, according to some sources (Barlaeus, 1647, p. 268), but not all. (Cf. Marcgrav,
● 445 1648, p. 285.) Round wooden plates and spoons of wood or bivalve shells were used at meals. Gourds served as cups. The pottery plates and the wooden or clay cups with handles appear to be more
352 recent. There were no tables; the *Mapuche-Huilliche* ate sitting on the ground.

264 The men ate together; the women ate apart from them. The wife placed food before her husband, but he did not eat till she told him to do so. It was likewise bad manners for a guest to start eating before being told by his host to do so. At a fiesta, it was a grave discourtesy for a guest to leave his plate not wiped clean (Rosales, 1877–78, 1:152, 154).

SETTLEMENTS AND DWELLINGS

361 **Settlements.**—The *Mapuche-Huilliche* lived, not in villages proper, but in settlements. Each settlement was made up of a number, usually small, three to eight or more, of families or households, each in its own dwelling. The households or homesteads were set up within sight of but at appreciable distances from one another—for fear, it was reported earlier, of witchcraft (Rosales, 1877–78, 1:150–51) or of poisoning (González de Nájera, 1889, p. 48)—and each settlement or loose cluster of households was separated by somewhat greater distances from the nearest ones. The settlements were located
[625] mostly in valleys or plains along streams and rivers. Generally speaking, each settlement was made up of kin (Marcgrav, 1648, p. 285) and had its own cacique. Some of the forts, settlements, or
712 dwellings appear to have been surrounded with a kind of palisade. (Ercilla, canto 1, 1910, p. 8; Mariño de Lovera, 1865, p. 130; Tribaldos, 1864, p. 21).

5:Cooper E-4 (no date) 1946 SG4 Araucanians SG4

Dyeing.—Dyes of many colors, the majority of them derived from plants but some from earths, were used to tint the wool. Mineral substances were used to dye wool black, red, yellow, and white; plants, for black, blue, green, red, yellow, coffee, and violet. (Cf. list of plant dyes in Lothrop, 1930, pp. 333–35.) Indigo was obtained by barter. Wool in natural coffee color and grays was also used.

A technique of tie-dyeing of the white warp, before the weft is woven, with ties of string and maki bark is described in detail by Felipe Reyes (in Guevara Silva, 1913, pp. 176–77; cf. Latcham, 1909, p. 339; Lothrop, 1930, p. 328; Millán, 1934, 1:220–22); a technique of combination tie- and resist-dyeing of the white warp, with the use of a white clayey earth paste as a resist, by Claude Joseph (1928 a, pp. 1029–1031).

Skin dressing.—The skins of various wild and domesticated animals, such as the puma, guanaco, wildcat, coypu, fox, deer, otter, sheep, horse, cattle, and dogs, were used as rugs, beds, saddles, straps, etc. If dressed with the hair on, the skin was stretched out, pegged on the ground. When dried, it was softened with the hands and by drawing to and fro in the notch of a forked stick hung to a post. Straps and thongs were rubbed with grease to keep them supple. To remove the hair, the skin was soaked in wood ashes and water, then fleshed with sharp stones, shells, or knives, until the roots of the hair were loosened. Then the hair was plucked out, and the skin dressed as above (Latcham, 1909, p. 339). According to Félix José (1916, 2:96), salt was put on skins to prevent rotting, they were softened by hand, and were then anointed with grease.

Pottery.—Pottery has been made and widely used by the *Mapuche-Huilliche* since pre-Hispanic times. Their country is rich in suitable clays. Pottery making was the woman's task. Tempering was done with fine sand or pulverized rock or shell; shaping, by the coiling method (pl. 184, *left*); smoothing, with a spatula, usually spoon-shaped. The kilns were pits dug in the ground or on hillsides, or firing was done inside the dwelling. Vessels of many kinds were made (pl. 184, *right*): Cooking pots, large jars with rounded or flat bases and without handles for carrying water or holding chicha, single- and double-bellied pitchers with one or two handles, the kóye metawe (an effigy pitcher crudely resembling a steamer duck), plates, dishes, etc. Some of these types are seemingly of rather recent introduction. A common pitcher type early depicted (*Marsden*, 1848, ill. p. 284) and occurring archeologically (Medina, 1882, figs. 194, 204–07) has a globular belly, rather narrow neck, and a single handle. In general, the pottery of the *Mapuche-Huilliche* and archeological specimens from their area are distinctly inferior in workmanship and decoration to the pottery of the historic and prehistoric cultures to the north and and northeast of the *Araucanian* region. Except for some geometric

5:Cooper E-4 (no date) 1946 SG4 Araucanians SG4

once made, was preserved a couple of days or more by igniting a piece of dry trunk of chagual (*Puya coerulea*) at one point and letting it smoulder (González de Nájera, 1889, p. 89). Lighted bundles of *Chagual* were used as torches (kñde).

Miscellaneous manufactures.—Gourds were made into dishes, bowls, trays, and containers for water and chicha; shells, into drinking vessels and spoons; later, bullock's horns were made into water containers. Wood was used to make plates, bowls, drinking vessels (malwe), and many other objects (cf. Claude Joseph, 1931, pp. 229–41); sea shells were earlier used for scraping wood (González de Nájera, 1889, p. 97). Awls were made of a sharpened bone. A small steel adze came into use later (Claude Joseph, 1931, p. 235, fig. 23). Sacks (ref'u) for storing grain were made of cowhide or horsehide; small bags of skin (yapaq) for holding parched grain. (Cf. for futher details, Claude Joseph, 1931; other artifacts have been noted passim in preceding sections of the present paper, q. v.; see also infra under Weapons, p. 730.)

MARRIAGE AND THE FAMILY

Acquisition of mates.—Beyond general statements such as Molina's (1901, p. 189), that "in marriage they scrupulously avoid the degrees of immediate relationship," we have few dependable details on *Mapuche-Huilliche* incest prohibitions. According to Guevara Silva (1929, 1:238, 2:167), marriage was prohibited between grandfathers and granddaughters, uncles and nieces, and children of brothers. Incestuous sex relations are reported to have occurred at times on the occasion of drinking sprees. Unilateral cross-cousin marriage with the mother's brother's daughter was the most preferred one but seemingly was not mandatory. A male called his mother's brother's daughter fuke (mother) while she called him peñeñ ("son," v. s.); if he did not marry her, he called her children and they him by sibling terms. A native concept rationalizing the cross-cousin preference was: "So there will not be any discord, she will look on me as her son and so will live in peace with me" (Cuña, in Mombeuth, 1936, p. 201). Marriage with wife's brother's daughter reported to Hallowell (1943, p. 490) by Colliñ Huaiquilef is not recorded elsewhere in our sources. Fraternal polygyny was common, "to avoid quarrels and jealousy" (Guevara Silva, 1913, p. 40). Under certain conditions (cf. infra) widows were in earlier times inherited by the deceased husband's eldest or other son (except the son's own mother), or brother, or nearest male relative.

The basic and normal procedure in marriage was the payment of the bride-price, a procedure very commonly accompanied with dramatized capture. The prospective groom either personally or through go-betweens entered into negotiations with the father or elder relative

5:Cooper E-4 (no date) 1966 BG4 Araucanians BG4

323
•415

[p. 734 B]

10: Hüger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

142
291
854

[415]

Small children. (Above): 1, Mother transporting child. (Note shredded quill of yucca in background.) 2, Chess being played by boy and girl. (Below): 3, Boy had to wear socks to be dressed up. 4, A child and his grandmother.

[p 12(0)]

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

491
316

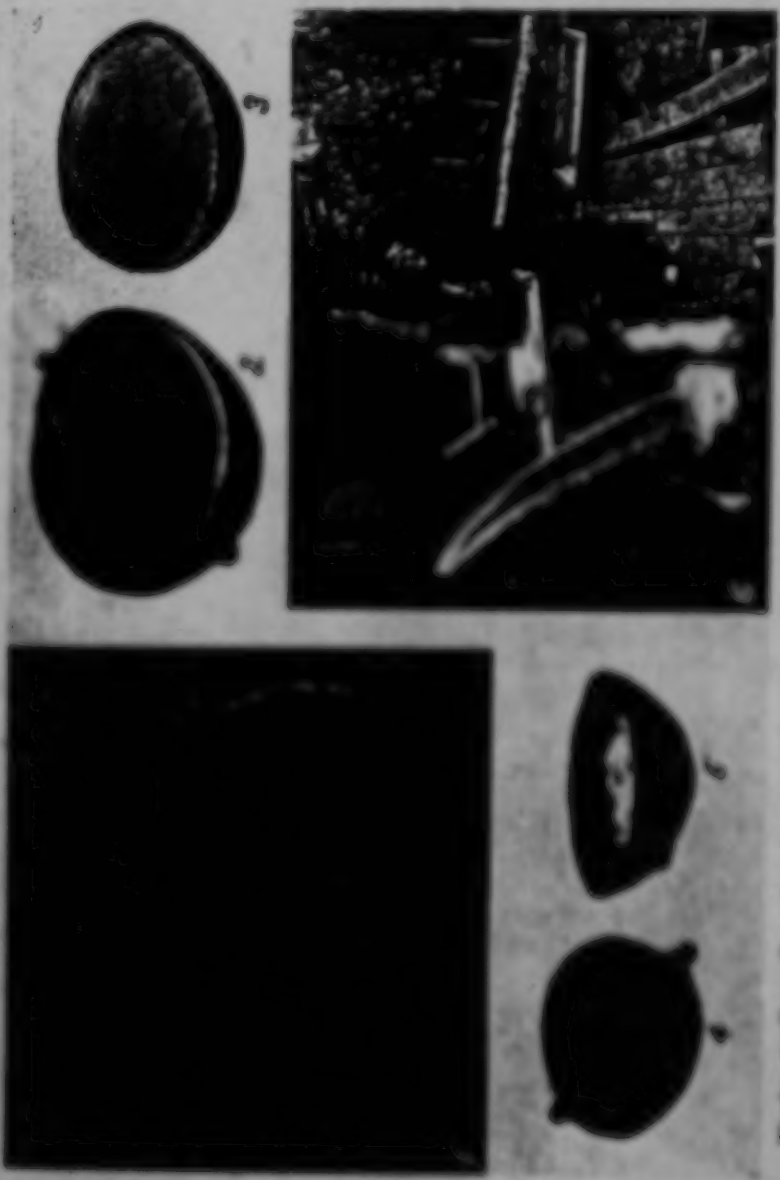
492
492
●915

534

[p. 28(F)]

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

415



F: 10[illegible]

10: Hüger E-5 (1946-1952) 1957
SC4 Araucaniana SC4
Chile

● 415

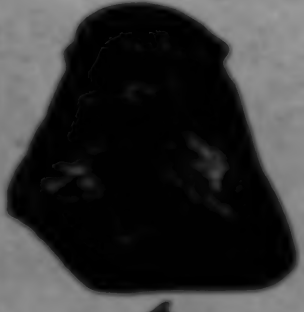
[252]

2

3

[251]

5



4

6

Cooking utensils: 1, Alacaluf girl stirring chili and salt with grease and marrow; 2, ladle for Alacaluf; and 3, other types of ladles and spoons; 4-6, Examples and subjects of ladle and shape, generally used for stirring salt, chili, and grease. (Figures 3-6 courtesy Museo Nacional de Historia Natural, Santiago de Chile.)

[p. 166(B)]

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

415
383

[352]

[p. 188(D)]

Publ. 3, Museo Nacional de Historia Natural, Santiago de Chile.

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

SMITHSONIAN MISCELLANEOUS COLLECTIONS

VOL. 133, NO. 4

Basketry: 1, Coñaripe woman weaving a küllen, used for carrying and storage. 2, A tightly woven basket, probably used for storage. (Courtesy Museo Nacional de Historia Natural, Santiago de Chile.) 3, Winnowing tray (Alepüe). 4, A carrying and storage basket (Coñaripe). 5, A basket (chaiwe) used as a filter, strainer, and drainer (Coñaripe).

[E)(83',P]

[H32]

H15 ●

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

252
415

Making maize (continued): 1, Sifting ashes. 2, Pouring sifted ashes into boiling water. 3, Pouring winnowed wheat into boiling water and ashes.

[P. 188(6)]

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

252
415

372

[p. 188 (H)]

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

252 354 and the middle of the ruka to prevent heating the back section of the ruka where potatoes and wheat are usually stored. No family in the areas studied had a factory-made stove, nor even an improvised one.

313 372 Firewood may be either split wood of desired lengths—piles of it were seen near a few ruka—or dried tree stumps, or a log several yards long. One end of the log is placed in the fire and shoved along as it burns down. Tree stumps are preferred for in-between-cooking fires because they burn slowly and long. All wood is laid at the edge of the fire, never on top of it.

[824] Ulmo, because it is a hard, nearly smokeless wood, is preferred as firewood. Other woods used are roble chileno, coihüe, and olivillo. The last is the least desirable as it creates so much smoke. In Boroa area, a nearly treeless region, large quantities of driftwood are collected in spring after the floods of rivers fed by mountain streams have subsided. Should a Boroa area family run short of firewood before the driftwood is available, it will fell trees found on the banks of streams in the area; this wood, however, is usually not the smokeless kind.

372 According to Cooper's sources (1946, p. 718) a hand drill was used in the early days to start a fire: the hearth was held on the ground by the feet while the drill was twirled with the hands. Flint and steel, and then matches, followed the hand drill. A 70-year-old Panguipulli man had never seen a fire started except with matches, which are being used in all areas today.

252 415 Kettles used in cooking are hung over the fireplace, either from a raft suspended from the rafters, 5 to 6 feet above the fire, or from a horizontal pole supported at each end by poles planted in the floor on opposite sides of the fireplace. The position of the horizontal pole is in line with the length of the ruka. In several small ruka the pole had been fastened to scantlings that supported the roof. The raft, usually square, is made of boards or saplings. Crossbars of boards or sapling are tied to the frame with voqui.

Kettles are suspended from the end of a chain or a stout wire. If a wire is used, its ends are bent to form hooks, the upper one being placed over the pole or raft and the kettle hung on the lower one. If a chain is used, the lower part of a stout S-shaped wire is placed into the upper link of the chain and the upper part over the pole or raft. A second S-shaped wire is used to suspend the kettle from any link along the chain, depending on how near to the fire the kettle is to be. A chain with S-shaped wires is preferred because of the adjustability to various heights.

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

Foods such as meat and fish and the stomach of sheep are slung over the raft or pole and there dried or smoked. Bunches of corn on the cob were seen astride the crossbars, and foods that must be kept dry, such as salt and flour, hung from them in containers. 251

Implements, probably traditional ones, used in the preparation and serving of food were seen in many households. Among them were wooden spoons, ladles, bowls, tumblers, mauls, and mortars; stone mortars, pestles, metates, and mullers; earthenware ones, such as cántaros and ollas; those made of parts of animals, such as cups, spoons, containers, and sieves; and those woven of plant fibers, namely, baskets and winnowing trays. All the above are made "by those who know how; not every family makes its own. One must have not only the intelligence to make them, but one must know how to make them and have the implements with which to make them." "I know how to make them," said the 52-year-old man, "but I do not have the necessary tools to do so." Kitchen implements of non-Araucanian origin in use were the 3-footed iron kettle, found in every ruka; knives and spoons; enamel or porcelain cups, plates, pitchers, and bowls; dishpans of tin; galvanized pails; and both iron and copper teakettles. 252 415

Of wooden utensils (pl. 42), spoons (pichara) are approximately 16 to 22 inches in length and have either a round or oval-shaped scoop 1 to 2 inches deep. These are used for stirring and for dipping foods. Stirring is also done with sticks of hard wood (wütrü). Wooden ladles (rauhwe) are used for lifting hot foods, such as tortillas. Wooden bowls (ral'i) serve primarily as nonbreakable dishes. They were seen being used for washing meat and vegetables, mixing food, soaking wash, carrying just-dyed hot yarn, threshing grain by feet, and for storage. Bowls are hewn out of cross sections of tree trunks big enough to permit two handles, and are from 6 to 9 inches in depth. The openings of round ones approximate 15 to 18 inches in diameter; trapezoidal ones, 12 by 18 to 15 by 22 inches. Wooden tumblers are used, today, exclusively for drinking mudai at the gillatun. A wooden tumbler exhibited in the Museo Araucano de Temuco (specimen No. 460) is 5 inches in height, nearly 3 inches in depth, and 2½ inches in diameter at the opening. The maul (trawuunakuwe), a piece of wood cut down to form a ball-like club at the end of a handle, is used for cracking or breaking bones, for jerking meats, cracking araucaria pine nuts, and for other similar operations.

Mortars (transchadwe or katankura) and pestles (kudi) (pl. 43, *1, 2, 3*) were used to grind and mix condiments, especially salt and chili. A few mortars were of wood; generally they are of lava stone, 252 412

10: Hilger E-S (1946-1952) 1957
SG4 Araucanians SG4
Chile

252
412

sandstone, or stone grooved by water action; an occasional mortar in use today was plowed up—"It probably belonged to people who lived here before we came." The general shape of mortars varies, but the bowls of all are approximately 3 inches in depth. The one shown in plate 43, *f*, was made of lingue and had four nails driven into the bottom of its bowl to facilitate grinding mixtures. Pestles were smooth, elongated stones. "I picked up the one we use on the shores of the Pacific while walking there one day."

In Alepín area, metates and mullers are shaped out of rock taken from ledges on the Pacific shore and are also given the required surface finish "by a family, the only one in all this area, who makes and sells them; this family has stone of the required texture on land near its ruka. It takes skill to make a metate and muller; each requires a different kind of roughness." Metates are trapezoidal in shape. A muller is an elongated stone, long enough to extend beyond the metate so the ends may be grasped when the muller is being used. The muller must have a rough, flat lower side and a slightly convex upper side. All edges of metate and muller are rounded. Metates generally approximate 15 to 20 inches in length, 11 to 13 inches in width, and 2 inches in thickness.

One of my informants prepared to grind wheat in a metate (pl. 44, *f*) by placing a dressed sheep pelt, reserved for this purpose, on the ground outside of her ruka, and on it the metate with widest end toward her. This end she raised by putting a small piece of wood under it. "It all depends on the worker, how high she wants it raised; I like mine raised this high," she commented. The narrow end rested on the pelt. She knelt down, took a handful of wheat from a winnowing tray nearby (she had just winnowed the grain to remove the last remnants of chaff), dropped the kernels on the metate, grasped the ends of the muller, put her weight on the muller and worked it up and down over the kernels, occasionally pushing the grain toward the middle of the metate. When a portion of the wheat was ground to the desired fineness, she allowed it to fall off the sides onto the pelt. The muller was never lifted from the metate. "Why should it be? I am grinding the wheat under it!" Toasted wheat was ground in the same manner.

252
415

The olla (chalka), a potlike piece of pottery, is used in cooking; the cántaro (nefikowe), a pitcherlike type (pl. 45), not sufficiently fired for cooking purposes, is used for holding water and other liquids. More cántaros than ollas were in use in households at the time of the present study. Ollas have been largely replaced by iron kettles, but several women were using ollas for storing food. Iron kettles (in-

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

formerly not infrequently called them olla) varied in depth from 252
6 to 14 inches; all were of equal diameter. The dependency on iron 995
kettles for cooking was expressed by an Alegüe woman who borrowed
one from a neighbor: "I have no olla; I broke ours. What a tragedy!
My husband says every storekeeper in San José de Mariquina and
Valdivia tells him there is none to be had any more because of the
World War. These chinches [pointing at galvanized pails and
enameled dishes] cannot stand the heat of the fireplace. I shall have
to make an olla of clay, it seems." No pottery plates or cups were
being made, but women had heard old people say that they were made
in former times. Any cups and spoons made today are of horn of 252
cow, as formerly. The horn is either boiled in water or buried in 995
hot ashes until soft, usually for several hours. If cups are desired, the 32
tip of the horn is cut off and the remainder cut into desired sections.
The narrower end of each section is then plugged with a piece of
wood. Such cups exhibited in the Museo Araucano de Temuco (Nos.
461, 462) were 3 to 5½ inches deep. If a spoon is desired, the horn is
cut lengthwise, flattened, and curved into the desired shape. Formerly
an unusually large horn in its natural state was used as a water carrier
on long journeys. Cow udders and pancreas were used for storing
salt, chili, and grease (pl. 43, 4, 5, 6). They were thoroughly cleaned
and distended by hand while drying. The opening was fastened to
a band of wood, and a strip of rawhide formed the handle.

Flour of a fine texture was sifted through a cheda, a sieve made by 252
stretching taut a piece of perforated rawhide over a circular band of 995
wood. A lacing passed through holes poked in the rim of the hide and
the middle of the band kept both in position. "My husband made this
cheda," said a woman, as she took out a peg in her rulo. "He used
horsehide for both sieve and thongs. The band is of avellano, a wood
that bends more easily than any other wood does. Avellano wood
becomes pliable if held over a fire for a short time. My husband used
a hot iron for poking the holes into the sieve and the band. Chedas are
usually the size of this one" (11 inches in diameter and 3 inches deep).

Coarse flour is sifted through a loosely woven small basket, called
chuive (pl. 46, 3). Chuives are used also for straining ashes off nuts
(wheat cooked in ashes) and for filtering chicha made of fruits and
corn. In fact, its use in general is that of sieve, strainer, drainer, or
filterer. Usually, when being used it is hung on a peg in a tilted
position. A rawhide strap, attached to the rim in handlelike fashion,
keeps the chuive from slipping on the peg. Attaching the strap at
points only a little apart keeps the chuive tilted. A chuive can also
be dipped up and down in water to rid its contents of soluble sub-

10: Folger E-9 (1946-1952) 1957
SG4 Araucanians SG4
Chile

252 915 ...seeds. Occasionally a chalwe, like ... baskets, is used for storage; chaff-free uncooked wheat and toasted ... wheat were seen so stored.

Baskets with handles (bilfilo) (pl. 6, *4*) are used for carrying and for storage; trayo (Depú) (pls. 44, *f*; 46, *3*), for winnowing wheat, dried beans, and peas, or "anything that needs to be winnowed."

222 262 Cooper writes regarding ... food plants which were part of the Araucanian diet: "The number of distinct species of wild plants exploited, a good many of them intensively, as food sources was very large, totaling probably ... good 75 to 100." One of his sources, an Araucanian, listed nearly ... plants. Among plants listed by Cooper are roots and tubers, ... of a fern, fruits and berries, apples (post-Columbian), nuts, ... leaves and greens, mushrooms and algae (1946, p. 708).

In all the areas I visited, ... Araucanian herbalists knew that wild plants formed a substantial part of ... Araucanian diet today. Children like to eat fresh berries and ... dried fruits and roots of certain plants, and many were seen at school ... with teeth blackened from the blue-black fruit of the maqui and the ... berries of michai and chakaiwa. They also relish the fresh fruit of ... tahue, chaura, and chupón. A child will reach into the spiney husk of ... chupón, get hold of a blade near its roots and pull it out, draw the root ... end between the teeth to sever the fruit, suck the juice, and spit out ... he seeds. "Their juice is sweet; just try some." Children are also fond ... of eating the peeled, uncooked root of the chuhuribilloo nalca, and the ... stem, just above the root, of a large fern called kalcalco grande.

[252] The stem and the stem of the kalcalco ... grande is dried, ground fine, and boiled in water (or, recently, in ... milk), and eaten as a thick soup. In Pangipulli, wild plants cooked in ... meat broth or in stews are green leaves of yuyo and dried powdered ... flowers of circuelillu. Tubers of the wild potato (papa), are sometimes ... collected, but those of lkwü, and of kuiñih (not identified) are no ... longer used. The wild potato is often crossed with cultivated ones ... by putting pieces or small whole ones of both kinds into each hill. "In another season this mixture produces a large potato, sweeter than ... the ordinary cultivated one. If the wild potato is planted alone, it ... does not produce well," said the informant.

222 263 Tomillo, a wild plant, is used as a ... condiment. So are two cultivated plants borrowed from Chilean ... peppermint (yerba buena) and origano. The most common ... nt is a mixture of salt and chili. Today salt is bought in Chilean ... es, but Cañaripe informants remembered when it was obtained from ... Araucanians who lived where it was found in caves. Families along ... the Pacific formerly cooked in

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

When done, it is eaten with boiled potatoes or tortillas. "Or, if you do not like onions, you can do this: after the meat has fried a short time, add a mixture of mashed boiled potatoes, very finely cut onions and chili and any other seasoning you may like, maybe trunlko or orégano; I add trunlko, sometimes." 251 252

A favorite dish is spiced lung of sheep or lamb. While the animal is still breathing, it is hung up by the head, its lungs are filled with a mixture of salt, chili, and a wild root called lisio. This bloats the lungs and the animal finally dies. A lung so bloated was seen hanging on a wall in an Alepún ruka. The lungs are then removed and hung up until the following day. The seasoning has now penetrated all fibers. The lungs are then cooked whole, and eaten with relish. 252

The coagulated blood of sheep and lambs at slaughtering time is seasoned with a mixture of salt, chili, and onions, and then either fried, or cooked with vegetables, and eaten immediately. "Anyone who happens to be around is invited to eat of it; we call it fachi."

Stomach and entrails of sheep and lambs are eaten fresh or smoked. An informant was met at a river where she had cleaned and washed the entrails, stomach, and pelt of a sheep which her husband had slaughtered earlier that morning. At home she boiled the entrails and stomach, and then scraped the lining of the stomach with a knife, boiled all again, and asked in a friendly way: "These are ready now to be eaten; would you like some?" The pelt she had hung on a fence to dry.

Stomachs of sheep were seen stretched on crosslike frames and hung over fireplaces. "I shall cook these for my family tomorrow," said one woman. Head, tongue, and feet of sheep were scraped of skin, cooked, and eaten. A woman who was cleaning some was swishing a chuiwe containing them back and forth in the current of a river. "I want them freed of every bit of fleece," she remarked.

Women, today, occasionally make Chilean empanadas. They consist of finely chopped seasoned mutton encased in tortilla dough. One woman made half-moon-shaped ones for sale at a fiesta, and fellow Araucanians favored her with purchases. She pounded the dough flat with her wrist, dropped a tablespoonful of the meat seasoned with a mixture of salt, chili, and onion greens on it, folded the dough, pressed the edges together with her thumb and impressed them with a home-made serrated wheel carved out of flattened horn. The field assistant thought of zigzag braid when she saw the edge. As the woman finished an empanada, she dropped it into a kettle of boiling [415]

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

252 with earth, and an active fire kept burning over them all day. In time for the evening meal, the luche is removed from the hoyos and cooked in water until well done. It is then either added to a caldo, usually meat broth with potatoes, or is deep fried and eaten with boiled potatoes. Cochayuyo is collected at low tide by women. They can be seen standing on the shore, each pulling at one until it is released from its roots. Cochayuyo is tied into small bundles, cooked, and eaten either deep fried or in a caldo.

271 Drinking water—uncontaminated, clear, and clean—is taken from springs. Springs are found at the upper ends of ravines, on wooded sides of hills, or in brooks or rivers, where one can see them bubbling up. Rukas are built only where springs exist. No family in the areas studied had a well. Water is carried to the ruka in cántaros [857] or pails. Children usually fetch it.

272 At the end of a meal a beverage known as yerba maté is taken by 177 all adults and many children (pl. 51, *f*). This drink was only recently introduced among Araucanians. A 60-year-old Coturipe woman remembered when an Araucanian man first taught them how to drink it; he had learned to do so in Argentina. "This was during the First World War. Little by little the Mapuche began to drink it. I drank the first yerba maté when my eldest son was a baby; he is now 26 years old. We buy packages of it in Temuco, Villarrica, and Lonconche." It is made by pouring boiling water on the leaves of *Ilex paraguariensis*, a non-Araucanian commercial product imported from Argentina and Paraguay. Usually it is prepared for drinking in a [415] dried gourd; sometimes in a spherical porcelain cup, called maté. In either case it is sipped slowly through a bombilla. If the beverage is preferred sweetened, sugar is mixed with the herb before the boiling water is poured on it.

273 If chicha, a fermented juice made of grains, fruits, or berries, or wild apples (manzanas silvestre) or cultivated ones, is at hand, it is usually drunk in place of yerba maté. Both homemade and commercial chicha is taken. Cooper's sources listed maize, quince, araucaria nuts, and, in later times, wheat and barley as being used in making fermented beverages; also berries and fruits, such as molle (*Schinus latifolius*), maqui, myrtle berries, strawberries (frutilla, *Fragaria chilensis*), and, in more recent times, apples, pears, quinces, and potatoes (1946, p. 741). Today Araucanians who wish to make chicha generally use the juice of apples or the berries of maqui or voqui colorado. Some old people use wheat, or berries other than those of maqui. Usually this beverage is consumed before it reaches the stage of alcoholic fermentation.

19: Milgor E-5 (1946-1952) 1957
SG4 Araucanians SG4
Chile

Formerly, according to a Pangipulli man older than 70 years, chicha was made in a bottle-shaped vessel of leather (trokal, fig. 3). At the open end, the leather was fastened to a rim of swollen wood by lianas of vines. This vessel was propped up by three or four poles, with one end of each pole poked under the rim and the other end planted in the ground.

In the early days, mudai, a fermented drink made of various grains, was the family beverage. Old women chewed the grain, usually uncooked dried corn, spat it into an olla, poured water on this, and let it ferment. The fermented liquid was poured off and drunk. Today, mudai is drunk only at the gillatun, machitun, and kowkunun. Women prepare both the mudai and the chicha.

Formerly two meals a day were eaten: one, a full meal, was taken as soon as it was prepared, which was usually in the late forenoon,

FIG. 3.—Trokal, a vessel of leather propped on sticks and used in chicha making. (Sketch made by Domingo Huenuan of Pangipulli.)

and another, a partial one, about bedtime, which was any time "between dusk and the time people usually get hungry."

Rising time for the family, today, as formerly, is the cock's crow. Often, therefore, everyone is up before sunrise. The woman, with the help of an older girl or even small children, sets about preparing a meal—"a meal like we always have had." One of the children will stir up the fire and keep it refueled, for a large fire has to be maintained so that there will be ashes for baking the tortillas. The mother, or an older girl, prepares the dough for the tortillas and then bakes them. "Other dishes, too, must be prepared. We usually have meat with tortillas and also either toasted wheat or catuto, and yerba maté. When we have no tortillas, we bake potatoes in ashes. That takes time, too." On the day of an interview, a Cofaripe woman had given her family as its main meal tortillas, soup thickened with wheat, roast lamb, catuto, and yerba maté. Men were encountered who had hoed potatoes or cut grain for several hours without having eaten anything. The women were preparing the meal, they would say. The evening meal usually consisted of left-overs from the main meal.

Mr. Miguel E-S (1940-1992) 1992
RIP Anniversary
Chile

10: Hüger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Argentina

342
341

342

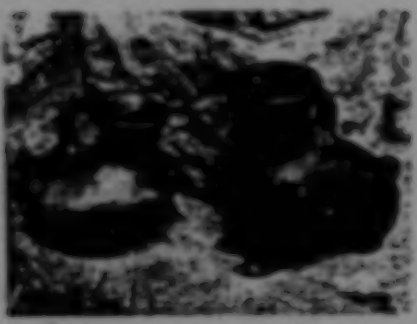
[854]
[415]

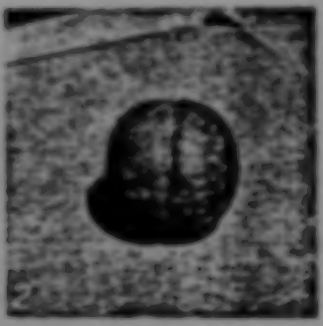
Plate 1 and 2. A 2-room dwelling, and 2, its occupants, a mother and her five children.

[p. 268(G)]

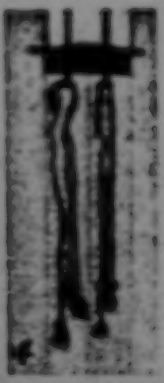
10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Argentina

323
324
[415]
[72]





[276]
[411]



776

Pottery and implements and objects of stone: 1, Jug (metawe), and 2, a ball of stone used in a boleodora. 3, Pottery pipe bowls, and 4, two boleodoras. (1, 2, 3, and 4, collection of Parque Nacional de Lanín.) 5 and 6, Two stones to which Araucanians attach significance. (Courtesy Bertha Ilg-Koessler.)

[p. 364 (D)]

19: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Argentina

to settle. The water that collected was poured off and handfuls of the potatoes squeezed to free them of any remaining water. The mass was then eaten either raw or slightly cooked. 252

Nuts from the cones of the araucaria (pl. 72, *3*) were a staple food for families who lived where the tree grows. Families from other areas, too, migrated annually to collect them for their own consumption. Today families collect them for sale—at the time the present study was being made, several Quilaquina families went to Chinquilhuen to do so. "They pick kilos of them; we buy them from these people." Large groves of the araucaria are still found in Pulmari between Lake Tromen and the Magdalena Valley, and in the areas surrounding Lake Alumine, Lake Huechulafquen, and Lake Currhue Grande. Small groves and scattered trees are found at Lake Moliquina and Lake Carmen. The tree bears its first nuts when about 25 years old, and it takes 2 years for them to ripen. The nuts, white and almondlike and nearly the size of dates, are either roasted or cooked in meat stews. To roast them they are strung on a thread of sinew and hung at a little distance over the fire. In days when they were used as food by all families they were dried in sun and air and stored for future use. [222 263]

Wild apples (*manzana silvestre*) were dried on racks over fireplaces and then eaten both cooked and uncooked. This custom prevails today. An extra supply is stored. [222]

Among implements used in preparing and serving food in the early days were ollas, cántaros, metates and mullers, mortars and pestles, plates and bowls, cups, knives, pichañas, spoons, lupe, baskets, and winnowing trays. 415

Ollas (*challa*), large-mouthed pieces of pottery, were sufficiently fired to be used in cooking. They could be placed directly in the flames of the fireplace; not so cántaros. Cántaros (*metawe*, pl. 76, *1*), large, narrow-mouthed pottery pitchers with one or two handles, were only sufficiently fired to be set in hot ashes or at the edge of the fire. Food could be simmered but not cooked in them. Cántaros were also used for storing food and for carrying and storing water. Ollas were always plain; cántaros sometimes resembled animals and were decorated. A pig-shaped, blackish-colored cántaro (pl. 76, *1*) found in a grave in Pulmari, and now in the collection of Parque Nacional de Lanín in San Martín de los Andes, is 8 inches high, 7½ inches at greatest width, and 4 inches in diameter at the opening. A duck-shaped one (pl. 76, *1*), found in a grave in Huechulafquen, is 7 inches high, 7½ inches at greatest width, and 3 inches in diameter at the opening. [415 172]

In 1950 workmen building a road found approximately 50 cántaros

10. Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Argentina

deposited under a large horizontally laid stone slab overgrown with shrubs near Mamuil Malál. Kolupan thought that women had put them there in the days when the Araucanians were being chased off their lands, hoping to reclaim them sometime. "To make a good clayware is a great deal of work," he noted; "those women probably thought of that when they hid them. Anyway, no one could have carried much pottery when fleeing."

Both metate and muller (lonfi and felmelonfi) were of stone. The metate was somewhat U-shaped; the muller was slightly convex, and had both ends extending sufficiently beyond the metate to enable the woman to grasp them. "Obviously our people ground wheat or some sort of grain years ago," said an 80-year-old woman, "for frequently we find metates and mullers in graves and also on the surface of the land. If we find them on the surface, we usually find silos and clayware there also. Maybe these were the places from which our people were driven by other people."

Mortar and pestle, too, were of stone. They were used primarily for mixing condiments, especially chili and salt. One mortar seen was 4½ inches high and approximately 5½ inches at greatest width. The hole used for mixing is 2½ inches in diameter and 1½ inches deep.

The hupe is a 4-cornered piece of pottery made expressly for toasting grain. Bowls were made from pottery or were carved out of wood. Thick soups and thin stews were eaten from them. "No spoons were needed when we ate from bowls, for we drank the food directly from the bowl." Plates were made of pottery or of cuhihue bark. When eating off plates, spoons were used. Foods that could be eaten with fingers, such as roasts, were served in one large dish carved from a tree trunk. "I still have one large dish that we used when I was a child, and that my father made; it is about so large [18 by 36 inches]."

Spoons used in eating were made by boiling horn of cattle until it appeared white, when it was soft enough to be easily cut into any shape desired. Large spoons used in stirring food in ollas and in serving it were carved from wood of quebracho. "Many Araucanians are again making spoons of quebracho; those metal spoons we buy in the stores break at the junction of the handle and scoop." Knives, in the early days, were made of quebracho also, "but they were too dull to cut most things."

Cups were made of pottery and of the head end section of horn of cattle. The smaller opening of the horn was plugged with wood. A horn cup used in Quilaquina (collection of Parque Nacional de Lanin, specimen No. 100) is approximately 6 inches in height and 3½ inches in diameter at the opening. An 88-year-old woman had made pottery

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Argentina

cups for use at the ŋillatun (1952): some were 6-inch-high mug-shaped ones, some were 4-inch-high cup-shaped ones with a handle each, and some were lily-shaped ones without handles. 415

The ŋichafa was used in scooping apples from their peelings. One from Malleo (specimen No. 5, collection of Parque Nacional de Lanín) made of bone is 5 inches long, 1 inch wide, and approximately ⅛ inch thick.

Baskets were of three types: the rəpi, the küllko (pl. 74, 4), and the kollkuŋu. All three were used for carrying; the rəni and küllko, as sieves also; the kollkuŋu, for storage also. The small round seeds of quinoa were sifted from coarse chaff through the rəni; wheat is so sifted today. Hot sand used in toasting wheat was sifted from the wheat through the küllko. Wheat was winnowed on a ulepol, a basketry winnowing tray. 415 285

Traditional implements are in use today; and so are factory-made ones, such as plates, cups, knives, forks, spoons, cooking utensils. Improvised utensils, such as tin cans to which wire handles were attached, were frequently seen (pls. 62, 1; 72, 1). 415

In the early days cooking was done over a fire in a shallow pit toward the front of the toldo. Smoke was emitted through an opening in the roof of the toldo directly over the fireplace. When weather permitted, cooking was done over an open pit outdoors. At present cooking is more often done on worn-down second-hand factory-made kitchen stoves, on heater stoves, or on improvised stoves made from oil drums. One man had made a stove by setting up two walls of brick about 4 feet apart and 18 inches high and putting over these a metal sheet; the front of the fireplace was left open. Today smoke is emitted between boards of walls and roof nearest the stove, or through a stovepipe led through a nearby wall, or occasionally through the roof. In rare instances a chimney is built of adobe brick. (Pls. 63, 1; 65, 1; 66, 2.) 252 354

A woman in Trumpul baked bread in an oil drum set in upright position (pl. 71, 1). The lower half of the drum was filled with sand. Pieces of tin rested on the sand and also across the opening of the drum. The space between these two pieces of tin was the oven. The woman built a fire on the windward side of the drum, and when it had burned down to glowing embers, she tested the heat of the oven with her hand. Finding it sufficiently hot, she placed a loaf of dough on the tin within the drum, replenished the embers with wood, and built a fire on the tin cover also. By the time both fires were burned to ashes, the bread was baked.

Open-pit fireplaces (pl. 72, 2) that I saw (they were said to be 354

10: Hilger E-5 (1946-1952) 1957
SG4 Araucanians SG4
Argentina

the floor, or on cloth sacks filled with carded wool that rest on factory-made bedsteads or homemade platforms. When sleeping outdoors, persons lie with feet toward the rising sun.

Traditionally, ollas and cántaros and containers made of hide were used for storing such things as grain and chicha. A schoolboy was storing a pair of socks and other belongings in the hide of a small pig. His brother was going to store his things in the hide of a stillborn fetus of a pig. The two boys had emptied the fetus through its mouth, organ by organ, and had then stuffed the skin, including the head, with grass. "As soon as the skin is thoroughly dry, I shall take all the grass out of it and put my things into it," said the little boy.

Things seen stored in sheds included lassos of braided horsehide, inner lining of horsehide, looms, bundles of recently shorn wool, sacks of spun yarn waiting to be dyed "when I know what colors I need for the pattern I want to make," several worn-down homewoven blankets, several bedsteads, dug-out tree trunks and boxes used for storing grain, cowhides, sheep pelts, saddle gear, ponchos, boots, men's and women's clothing. Potatoes were stored on platforms of colihüe stalks that rested on beams of rafters. In the fall of the year hay and straw also are stored in these sheds, unless the family has a separate shed for the purpose.

CLOTHING

In the early days guanaco wool was woven into material used for clothing. "This material was soft and delicate like silk," said an old informant.

Clothing of boys and girls followed the traditional pattern of adults'. A man's clothing included pants (chiripe) and a poncho (makuñ). Those who wished to do so wore ojotas on the feet; in general, however, everyone was barefoot. Horseback riders often wore boots (ʃumell). Kolupan demonstrated how a chiripe should be worn by wrapping a piece of cloth lengthwise around his waist letting it overlap in front. ("This should be chamall," he noted, chamall being an oblong piece of woven material used for clothing.) He secured it at the waistline with a woven belt (trarüwe), pulled the lower back edge forward between his legs and tucked it under and over the belt. Belts were usually 7 feet long, 3½ inches wide, and ended in fringes. Then he put on his poncho, and said, "All I need now to be dressed as formerly is a pair of ojotas or ʃumell (boots) and a band about my head to keep my hair back." He indicated bringing a band across the forehead and temples, crossing it at the back of the head, bringing it forward, and tying a knot in it near the temple.

1: Métraux--140 E-5 (1929) 1930 SF10 Chiriguano SF10
Choroti SK6
Araucanians S64
Tupi-Guarani SL6

/377/

Wooden Bowls and Basins

C 415 171 439

The Chiriguano also use wooden bowls (Fig. 49). I do not know whether they make them themselves or receive them from the half-breeds of the /Fig. 48 appears here/ San Luis region. In this latter case the Chiriguano of the San Luis (Entre-Rios) region would be the only ones to make them. In Tarija /Figs. 49-50 appear here./ where these bowls are much sought after by the half-breeds, they were indicated to me as coming from that zone. The rare wooden bowls which /378/ I saw at Caipipendí had been bought by the Chiriguano in the course of their trips. The same origin must be attributed to the wooden troughs found among the Chiriguano who live near the Quichua half-breeds of Tarija department. These basins are used for washing food and also as bathtubs. Ci 415 177 The Choroti have wooden dishes (Nordenskiöld, 9, Fig. 20, p. 88) which have a shape very similar to that of the trough reproduced here (Fig. 50) and which doubtless were introduced among them either by the ancient Quichua or by the half-breeds. A 415 171 Among the Araucan of Argentina wooden basins are found, which are similar in every detail to those of the Indians and half-breeds of Bolivia and the specimen pictured here.

Chapter V

Tools of the Chiriguano

C 412 178 [179]

The work tools the Chiriguano use nowadays are almost all of European manufacture. Here and there the ancient forms were kept when stone or bone were replaced by iron. Witness the adze of Plate XXII /see p.143 / which constitutes a curious survival of the eared or T-shaped ax certainly adopted by the Chiriguano after their migration and their establishment at the foot of the Andes. T-G [412 184] This type of ax is unknown to me from any other Tupi-Guarani tribe and is rare in the area occupied by the different nations belonging to this linguistic family (see Rivet, 1, pp. 149-155).

2: Musters T-5 (1869-1870)1873
SH5 Tehuelche SH5
Araucanians SG4

the settlers, most probably the latter, and the certain impoverishing of the country.

After the parlemento a grand banquet was given by Cheoeque to all the assembled caciques and their sons. Over three huge fires in his spacious toldo, large iron pots were supported on tripods, containing beef, mutton, and horse-flesh. The guests sat down as they could, while Cheoeque sat, as the Spaniards says, 'on horseback' on a chair in the middle of the toldo, dressed in a magnificent cat-skin mantle, and holding a 'revengue' or hide whip in his hand, with which he ever and anon chastised an intrusive dog, or even one of his numerous sons if they came too near, or made too much noise.

The small boys were evidently used to it, and showed great agility in avoiding a blow, and equal unconcern if they received it. The chief's three wives presided at the fires, and wooden platters loaded with large portions of meat and a due allowance of fat were handed round for the first course. Each guest was expected to consume all that was in the platter, and when cleared it was carried off, washed, and refilled for another. The second course consisted of apples and piñones, raw or cooked according to taste, and it was strict etiquette to eat or pocket all the fruit supplied. Water was handed round after the feed, no other drink being produced save a private bottle, from which the chief helped two or three of his most favoured guests. There must have been at least thirty present at once, and there were ample room and abundant supplies. And subsequently a succession of guests of less distinction were fed; all the Tehuelches as well as Araucanos and Picunches being maintained during their stay by the chief.

I was very much struck with the obedience and respect evinced by these people towards their caçique. His authority extends as far north as Mendoza, over hundreds of Indians, residing in fixed tolderias, some few in the valley near Manzanas, but the chief part more to the northward,